Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)

2. (Currently Amended) The production method of a multilayer ceramic capacitor as set forth in ~~claim 1,~~claim 5, wherein a temperature of heat processing after firing under said reducing atmosphere is 1000°C or more.

3. (Currently Amended) The production method of a multilayer ceramic capacitor as set forth in ~~claim 1,~~claim 5, wherein an oxygen partial pressure at the time of heat processing after firing under said reducing atmosphere is 10^{-3} Pa to 1 Pa.

4. (Original) The production method of a multilayer ceramic capacitor as set forth in claim 2, wherein an oxygen partial pressure at the time of heat processing after firing under said reducing atmosphere is 10^{-3} Pa to 1 Pa.

5. (New) A production method of a multilayer ceramic capacitor, comprising:

firing a green chip to be a capacitor element body including dielectric layers and internal electrode layers in a reducing atmosphere; and

performing heat processing under an atmosphere of which oxygen partial pressure is higher than the reducing atmosphere;

wherein an average particle diameter (R), in a direction parallel with the internal electrode layers, in dielectric particles constituting a dielectric layer of said dielectric layers is made to be larger than thickness (d) of said dielectric layer,

wherein a ratio (R/d) between said average particle diameter (R) and the thickness (d) of said dielectric layer satisfies $1<R/d<3$,

wherein the thickness (d) of said dielectric layer is less than 3 μm,

wherein the internal electrode layers are separated by a distance of no more than the size of at least one particle of said dielectric particles, and

wherein at least one of said dielectric layers includes at least said dielectric particles and a grain boundary phase, and an area ratio of said grain boundary phase in a section of said dielectric layer is 2% or less.

6. (New) A production method of a multilayer ceramic capacitor, comprising:

firing a green chip to be a capacitor element body including dielectric layers and internal electrode layers in a reducing atmosphere; and

performing heat processing under an atmosphere of which oxygen partial pressure is higher than the reducing atmosphere;

wherein an average particle diameter (R), in a direction parallel with the internal electrode layers, in dielectric particles constituting a dielectric layer of said dielectric layers is made to be larger than thickness (d) of said dielectric layer,

wherein a ratio (R/d) between said average particle diameter (R) and the thickness (d) of said dielectric layer satisfies $1<R/d<3$,

wherein the thickness (d) of said dielectric layer is less than 3 μm,

wherein the internal electrode layers are separated by a distance of no more than the size of at least one particle of said dielectric particles, and

wherein said dielectric particles have a core-shell structure.

7. (New) A production method of a multilayer ceramic capacitor, comprising:

firing a green chip to be a capacitor element body including dielectric layers and internal electrode layers in a reducing atmosphere; and

performing heat processing under an atmosphere of which oxygen partial pressure is higher than the reducing atmosphere;

wherein an average particle diameter (R), in a direction parallel with the internal electrode layers, in dielectric particles constituting a dielectric layer of said dielectric layers is made to be larger than thickness (d) of said dielectric layer,

wherein a ratio (R/d) between said average particle diameter (R) and the thickness (d) of said dielectric layer satisfies $1<R/d<3$,

wherein the thickness (d) of said dielectric layer is less than 3 μm,

wherein the internal electrode layers are separated by a distance of no more than the size of at least one particle of said dielectric particles, and

wherein at least one of said dielectric layers includes said dielectric particles, a grain boundary and a grain boundary phase, a segregation phase exists in said grain boundary phase, and said segregation phase contains at least two kinds of elements selected from the group consisting of Mn, Y, Si, Ca, V and W.

8. (New) The production method of a multilayer ceramic capacitor as set forth in claim 6, wherein a temperature of heat processing after firing under said reducing atmosphere is 1000°C or more.

9. (New) The production method of a multilayer ceramic capacitor as set forth in claim 6, wherein an oxygen partial pressure at the time of heat processing after firing under said reducing atmosphere is 10^{-3} Pa to 1 Pa.

10. (New) The production method of a multilayer ceramic capacitor as set forth in claim 7, wherein a temperature of heat processing after firing under said reducing atmosphere is 1000°C or more.

11. (New) The production method of a multilayer ceramic capacitor as set forth in claim 7, wherein an oxygen partial pressure at the time of heat processing after firing under said reducing atmosphere is 10^{-3} Pa to 1 Pa.

12. (New) The production method of a multilayer ceramic capacitor as set forth in claim 8, wherein an oxygen partial pressure at the time of heat processing after firing under said reducing atmosphere is 10^{-3} Pa to 1 Pa.

13 (New) The production method of a multilayer ceramic capacitor as set forth in claim 10, wherein an oxygen partial pressure at the time of heat processing after firing under said reducing atmosphere is 10^{-3} Pa to 1 Pa.